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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/354,945	07/15/1999	AKIO KOSAKA	09952/029001	5787

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EXAMINER

CRAVER, CHARLES R

ART UNIT PAPER NUMBER

2682

*22*

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/354,945

Applicant(s)  
Kosaka

Examiner  
Charles Craver

Art Unit  
2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Nov 24, 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jul 15, 1999 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5, 6, 8, 12, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya et al, of record, in view of Ohno, US Pat 5,848,062.

**Regarding claims 1 and 8,**

Nakaya discloses a radio communication terminal (100) having a battery (127) comprising

power detecting means (131) for detecting remaining battery power (col 4 lines 50-57),  
speed setting means (133, col 4 lines 57-61) for setting different data rates (reads radio communication rates) for which the terminal is able to communicate based on the remaining power (col 3 lines 11-25), the speed decreasing as the power decreases (col 3 lines 25-28, col 8 line 31-col 9 line 26), and

control means (110) for controlling data communications at said speeds (col 4 lines 55-61).

Nakaya further discloses that the decreasing rate is done to lower power consumption (col 9 lines 18-26).

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Nakaya fails to disclose that the transmission speed may be set.

Ohno discloses an analogous art, that is, means for changing coding speed settings in a portable phone based on battery conditions (col 3 lines 20-48), wherein speed settings may further include lowering the amount of data transmitted over a given period of time, i.e. rate or speed of data transmission (col 5 line 36-col 6 line 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nakaya to change data transmission speed; Nakaya already discloses lowering the rate of data encoding, which would lower the overall amount of data sent in an amount of time (see for example encoding every-other-frame), and Ohno discloses that reducing data transmission speed can further save power. Adding the feature of Ohno would thus reduce battery usage even more and extend battery life.

**Regarding claims 5 and 12,**

Nakaya discloses a radio communication terminal (100) having a battery (127) comprising

image communicating means (112, 123, 125),

power detecting means (131) for detecting remaining battery power (col 4 lines 50-57),

means to change resolution based on the battery, and that the resolution is directly proportional to the battery charge (i.e. increases with charge, col 5 line 28-col 6 line 29)

speed setting means (133, col 4 lines 57-61) for setting different data rates (reads radio communication rates) for which the terminal is able to communicate based on the remaining

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power (col 3 lines 11-25), the speed decreasing as the power decreases (col 3 lines 25-28, col 8 line 31-col 9 line 26), and

control means (110) for controlling data communications at said speeds (col 4 lines 55-61).

Nakaya further discloses that the decreasing rate is done to lower power consumption (col 9 lines 18-26).

Nakaya fails to disclose that the transmission speed may be set.

Ohno discloses an analogous art, that is, means for changing coding speed settings in a portable phone based on battery conditions (col 3 lines 20-48), wherein speed settings may further include lowering the amount of data transmitted over a given period of time, i.e. rate or speed of data transmission (col 5 line 36-col 6 line 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nakaya to change data transmission speed; Nakaya already discloses lowering the rate of data encoding, which would lower the overall amount of data sent in an amount of time (see for example encoding every-other-frame), and Ohno discloses that reducing data transmission speed can further save power. Adding the feature of Ohno would thus reduce battery usage even more and extend battery life.

**Regarding claim 6 and 13,**

Nakaya further discloses

image communicating means (112, 123, 125),

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display means (103) for displaying received images,  
means for inhibiting image transmission based on the remaining detected power,  
specifically, if detected power is below a threshold, after which the reception means may  
continue to receive (col 8 lines 30-66). In such a case, the latest received image would inherently  
be  
displayed at such a time.

**Regarding claim 16,**

Nakaya discloses a radio communication terminal (100) having a battery (127)  
comprising  
image communicating means (112, 123, 125),  
power detecting means (131) for detecting remaining battery power (col 4 lines 50-57),  
means to change resolution based on the battery, and that the resolution is directly  
proportional to the battery charge (i.e. increases with charge, col 5 line 28-col 6 line 29)  
speed setting means (133, col 4 lines 57-61) for setting different data rates (reads radio  
communication rates) for which the terminal is able to communicate based on the remaining  
power (col 3 lines 11-25), the speed decreasing as the power decreases (col 3 lines 25-28, col 8  
line 31-col 9 line 26), and  
control means (110) for controlling data communications at said speeds (col 4 lines 55-  
61).

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Nakaya further discloses that the decreasing rate is done to lower power consumption (col 9 lines 18-26).

Nakaya fails to disclose that the transmission speed may be set.

Ohno discloses an analogous art, that is, means for changing coding speed settings in a portable phone based on battery conditions (col 3 lines 20-48), wherein speed settings may further include lowering the amount of data transmitted over a given period of time, i.e. rate or speed of data transmission (col 5 line 36-col 6 line 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nakaya to change data transmission speed; Nakaya already discloses lowering the rate of data encoding, which would lower the overall amount of data sent in an amount of time (see for example encoding every-other-frame), and Ohno discloses that reducing data transmission speed can further save power. Adding the feature of Ohno would thus reduce battery usage even more and extend battery life.

3. Claims 2-4, 7, 9-11, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya in view of Ohno and Flynn, of record.

**Regarding claims 2 and 9,**

Nakaya discloses a radio communication terminal (100) having a battery (127) comprising

power detecting means (131) for detecting remaining battery power (col 4 lines 50-57),

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speed setting means (133, col 4 lines 57-61) for setting different data rates (reads radio communication rates) for which the terminal is able to communicate based on the remaining power (col 3 lines 11-25, col 8 line 31-col 9 line 26), and

control means (110) for controlling data communications at said speeds (col 4 lines 55-61).

Nakaya fails to disclose that the transmission speed may be set, or means for detecting an external power supply (charger).

Ohno discloses an analogous art, that is, means for changing coding speed settings in a portable phone based on battery conditions (col 3 lines 20-48), wherein speed settings may further include lowering the amount of data transmitted over a given period of time, i.e. rate or speed of data transmission (col 5 line 36-col 6 line 4).

Flynn discloses the utility of providing battery charging means to a portable device with battery power-level based control (col 7 lines 16-22, col 8 lines 13-30, col 10 lines 8-42), inherently comprising means to detect the presence of the charging means.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add a charger of Flynn and the speed setting means of Ohno to Nakaya. The charger feature would alleviate the need to constantly replace batteries, saving the user money, and was notoriously well known to anyone of ordinary skill in the art as an obvious improvement in portable battery-powered communication devices. Such a charging step would thus increase the power in the battery, and increase the data rate accordingly, based on the teachings of Nakaya.



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Further, Nakaya already discloses lowering the rate of data encoding, which would lower the overall amount of data sent in an amount of time (see for example encoding every-other-frame), and Ohno discloses that reducing data transmission speed can further save power. Adding the feature of Ohno would thus reduce battery usage even more and extend battery life.

**Regarding claims 3 and 10,**

Nakaya further discloses image transmitting means (112), including means to change resolution based on the battery (and thus the charging, col 5 line 28-col 6 line 29).

**Regarding claims 4 and 11,**

Nakaya further discloses a display (103), and discloses the utility of darkening a display if the battery remaining power drops below a threshold (col 2 lines 7-15); as such, in the combined invention of Nakaya and Flynn, in the case the charger is plugged in and detected and power flows to the battery causing the remaining power to again surpass said threshold, the display would then be relit.

**Regarding claims 7, 14 and 15,**

Nakaya further discloses power detecting means (131) for detecting remaining battery power (col 4 lines 50-57). In such a case that the charging means of Flynn is not connected to the device, power would not be replenished, and as such the battery power level would decrease; thus, in such a case, the speed setting means would begin the process of decreasing the communication speed. In the case of claim 15, the charging would, as stated above in the rejection of claims 4 and 11, cause the device to raise the communications level once said

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threshold had been surpassed. Said method would inherently operate the same irrespective of the power supply used.

Nakaya further discloses that the decreasing rate is done to lower power consumption (col 9 lines 18-26).

***Response to Arguments***

4. Applicant's arguments filed 3-18-03 have been fully considered but they are moot in view of the new grounds of rejection.

***Conclusion***

**5. Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872-9314, (for formal communications intended for entry)

**Or:**

(703) 872-9314 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington VA, sixth floor (receptionist).

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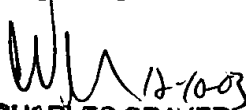
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Craver whose telephone number is (703) 305-3965.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin, can be reached on (703) 308-6739.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

cc

C. Craver  
December 10, 2003

  
**CHARLES CRAVER**  
**PATENT EXAMINER**